



December 20, 2022

Jon Beem
D.R. Horton
11241 Slater Avenue NE #200
Kirkland, Washington 98033

**RE: Geotechnical Peer Review Response Letter
Parkland Heights Plat
4929 Issaquah-Pine Lake Road Southeast
Issaquah, Washington
RGI Project No. 2021-129-1**

Reference: The Riley Group, Inc Geotechnical Engineering Report, MacLean Property Plat, Issaquah, Washington dated June 30, 2021 and Slope Setback Exemption Letter, MacLean Property Plat, Issaquah, Washington dated March 31, 2022

Dear Jon Beem:

The Riley Group, Inc. (RGI) is pleased to provide this letter addressing the Geotechnical peer review comments prepared by Golder dated November 3, 2022. RGI previously prepared the referenced Geotechnical Engineering Report (GER) and Slope Exemption Letter for the plat. The review comments are provided, followed by our responses.

Comment #1: The Geotechnical Letter refers to IMC 18.10-580.E.2, in order to seek an exemption for a “setback” from slopes along Issaquah-Pine Lake Road and Southeast 48th Street. IMC 18.10-580.E.2 does not use the term “setback”, but instead uses the term “buffer”. It appears the applicant is seeking a buffer exemption and not a building setback exemption. Note that IMC 18.10-580.E.2 allows for a buffer exemption, but it cannot grant a building setback exemption. Any exemption granted would be determined by the City of Issaquah and its planners, but it appears very likely that the building setback criteria from retaining walls would still apply.

Please confirm the applicant is seeking a buffer exemption in accordance with IMC 18.10-580.E.2 and not a building setback exemption.

RGI Response #1: The applicant is seeking a buffer exemption to allow the regrading of the existing slope areas. Per IMC 18.10-580.E.2, Any slope which has been created through previous, legal grading activities may be regarded as part of an approved development proposal. Any slope which remains equal to or in excess of forty (40) percent following site development shall be subject to the protection mechanisms for steep slopes.

The slopes are exempt, as they were created through previous legal grading activities. The slopes are to be regraded to allow the roadway widening and final grades supported by rockeries and retaining walls. Based on the preliminary plan, the improvements should not require buffers of setbacks following the construction.

Comment #2: The Geotechnical Letter states that the slopes along Issaquah-Pine Lake Road and Southeast 48th St were created by grading the road and are cut into bedrock. In addition, Section 4.6.1 of the Geotechnical Report states that the steep slope areas “appear to have been created by roadway and pond cuts...” Although it appears logical that the road cuts created the steep slopes, there is no evidence submitted in the package for the reviewer to verify these claims.

Please provide evidence to support these claims, such as pre-construction and post-construction topography maps of the steep slopes, aerial imagery, field observations and physical evidence etc.

RGI Response #2: Review of USGS mapping from 1950 show that Issaquah-Pine Lake Road Southeast was not straight, and was located a distance east of the eastern property line. Currently, the road cuts are located at the eastern property line, with the straightened Issaquah-Pine Lake Road Southeast near the toe. Overlapped USGS maps from 1950 and 2020 with Issaquah-Pine Lake Road Southeast locations are shown on Figure 1. Reconnaissance of the road cut along Issaquah-Pine Lake Road Southeast shows bedrock exposed in the cut face at several locations in the lower portion of the cut. A photo of exposed bedrock is shown on Figure 2. The Grading plan for Aspen Meadows showing the grading for Southeast 48th Street is attached to this letter.

Comment #3: Per the submitted materials, it appears that a buffer exemption, as outlined by IMC 18.10-580.E.2, can apply to this proposed development, but only if the applicant can confirm the grading activities along the steep slope sections were in fact “legal grading activities” per IMC (refer to comment #2). However, as described in Comment #1, it is unlikely that an exemption to the building setback requirements will be granted by the City of Issaquah and its city planners, as the code does not appear to grant such an exemption. Based on the reviewer’s interpretation, it appears the applicant, if granted the exemption, would be allowed to regrade the steep slopes with protection mechanisms, as shown in the Plan Set with a proposed rockery and MSE (lock n load) wall. However, the retaining wall designs will be subject to future geotechnical review. The proposed wall systems will need to be designed to meet applicable codes and address internal and external static and seismic stability, surcharge loading, drainage, and global stability.

At the appropriate stage, the applicant should submit supporting design and analysis documentation for the critical area retaining walls for geotechnical peer review. At a minimum the applicant should provide an updated Geotechnical Report or a geotechnical addendum with additional analyses and recommendations.

RGI Response #3: Design and analysis will be completed later during the design phase of the project including stability.

Comment #4: The Geotechnical Letter states that the slopes along Issaquah-Pine Lake Road and Southeast 48th St are cut into bedrock. Section 4.6.1 of the Geotechnical Report states that the steep slope areas “are likely primarily cut into bedrock”. Since no geotechnical investigation was performed along the steep slopes, and the fact the steep slopes were noted as “well vegetated” during the reconnaissance, the reviewer cannot verify this claim. Consider providing additional information/data to verify that the slopes “are likely primarily cut into bedrock.”

RGI Response #4: Reconnaissance of the slopes along Issaquah-Pine Lake Road Southeast show exposed bedrock in the lower portion of the cut slopes along most of the eastern property line. Bedrock was not observed in the cuts near the intersection of Issaquah-Pine Lake Road Southeast and Southeast 48th Street or in any cuts along Southeast 48th Street, where the slope face is covered in loose surficial soil.

Comment #5: Section 4.6 of the Geotechnical Report addresses geologic hazards such as erosion, landslide, and earthquakes. Please comment on all IMC critical area hazards with respect to the site. If the hazard is absent, please still note that it is absent in the response to this comment

RGI Response #5: Erosion Hazard Areas: Portions of the site are erosion hazard areas and in accordance with IMC clearing is limited to April 1st to November 1st. An erosion control plan will be necessary for the site development.

Landslide/Steep Slope Hazard Areas: The site contains steep slope and landslide hazard areas due to 40 percent or greater slopes. The slopes should be exempt due to previous grading activity and are to be regraded and supported by retaining walls and rockeries.

Seismic Hazard Areas: Since the site is underlain by glacial till and bedrock, RGI considers that the possibility of liquefaction during an earthquake is minimal.

Coal Mine Hazard Areas: The Black Nugget Coal Mine had underground workings approximately one mile east of the site. No known coal mine workings are located below the site.

Comment #6: The Plan Set does not delineate steep slope sections as defined in IMC and does not dimension slope buffers and building setbacks. Please update drawings to include shading / hatching of steep slope sections and dimension slope buffers and building setbacks.

RGI Response #6: The drawings will be updated to show the steep slope areas that are part of the requested exemption.

Comment #7: Section 5.3 notes that the foundations can be supported on “dense native soil or structural fill”. The Plan-Set shows varying cuts and fills across the site with cut/fill transition zones intersecting some of the lots. This could result in a building’s foundation system that is supported on both native soil (cut) and structural fill resulting in differential settlements exceeding allowable thresholds. Please clarify the geotechnical recommendations, specific to lots with cut/fill transition zones, and provide recommendations for mitigating excessive differential settlements (e.g., over excavation).

RGI Response #7: Based on the depth of the structural fill needed, the compaction requirements for structural fill and the relatively conservative bearing capacity for the foundations, we do not expect the differential settlements of foundations to exceed the allowable thresholds.

Please call us at (425) 415-0551 if you have any questions or need additional information.

Respectfully submitted,

THE RILEY GROUP, INC.

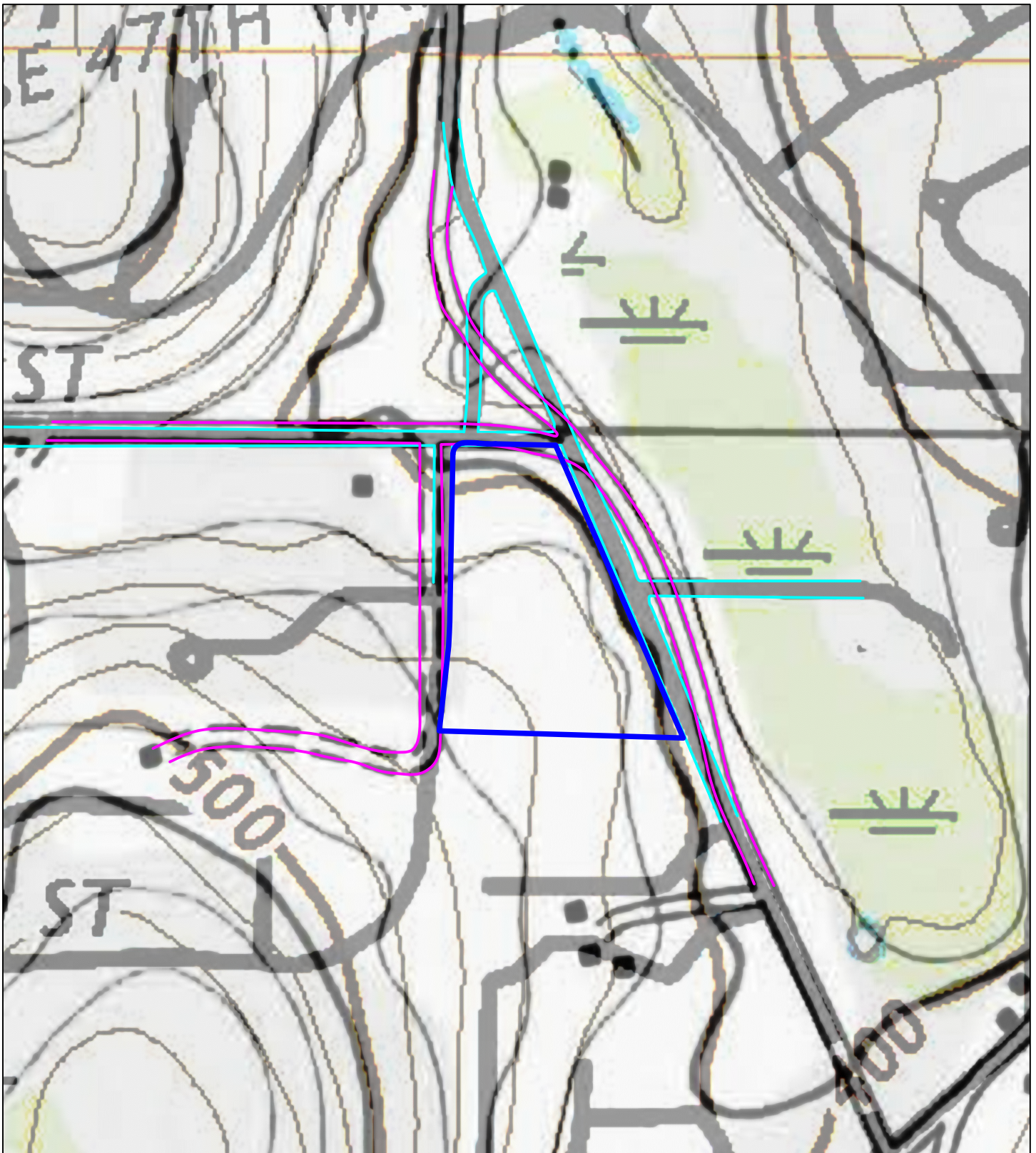


Eric L. Woods, LG
Senior Geologist



Kristina M. Weller, PE
Principal Geotechnical Engineer

Attachments: Figure 1 Site Map with Road Realignment
 Figure 2 Site Photographs
 Aspen Meadows Grading Plan



- = 2020 USGS, Issaquah, Washington
- = 1950 USGS, Issaquah, Washington
- = Site boundary

Approximate Scale: 1"=300'



Corporate Office
17522 Bothell Way Northeast
Bothell, Washington 98011
Phone: 425.415.0551
Fax: 425.415.0311

Parkland Heights Plat

RGI Project Number:
2021-129-1

Site Map with Road Realignment

Figure 1

Date Drawn:
12/2022

Address: 4929 Issaquah-Pine Lake Road Southeast, Issaquah, Washington 98029



Rock outcrop along Issaquah-Pine Lake Road Southeast, looking north.



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Site Photograph

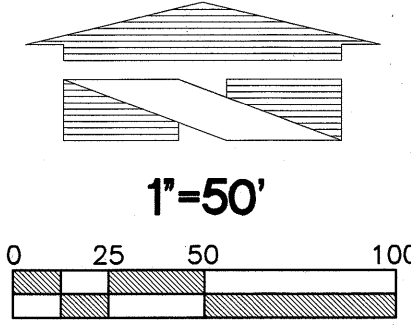
Figure 2

Date Drawn:
12/2022

Address: 4929 Issaquah-Pine Lake Road Southeast, Issaquah, Washington 98029

A PORTION OF SECTION 22, TOWNSHIP 24 N, RANGE 6 E, W.M.

SPECIAL NOTE
THE REGRADE OF THE EXISTING ROADWAY PROFILE ON SE 48TH STREET FROM STA 2+72.53 TO STA 7+00 MUST BE COMPLETED PRIOR TO FINAL PLAT RECORDING OF ASPEN MEADOWS. PLEASE NOTE THAT THE REGRADE OF SE 48TH STREET IS ALSO REQUIRED OF THE UPLANDS DIVISION 2 PROJECT AND THE PINE VIEW PROJECT. IN THE EVENT THAT EITHER OF THESE OTHER 2 PROJECTS COMPLETES THE REGRADE PRIOR TO THE RECORDING OF ASPEN MEADOWS, THEN THE ASPEN MEADOWS PROJECT WILL BE RELIEVED OF THIS WORK AND PLAT CONDITION 8.D.1. WILL BE CONSIDERED SATISFIED.



(SEE PROFILE, SHEET 10)
SE 48TH STREET (NEIGHBORHOOD COLLECTOR)

CITY OF SAMMAMISH
CITY OF ISSAQUAH

TEMPORARY CONSTRUCTION EASEMENT

2:1 CUT SLOPE

25' BUFFER

WETLAND D

1:1 CUT SLOPE

2:1 CUT SLOPE

SLOPE EASEMENT

EXCAVATE EAST END OF EXISTING MAN MADE POND TO COMPENSATE FOR VOLUME FILLED AT WEST END OF POND.

PROPOSED TOP OF BERM EL=412.50

EXISTING MAN MADE POND FOR IRRIGATION WATER STORAGE. GRAVEL SOILS SEALED WITH BENTONITE. THIS IS NOT A WETLAND.

TEMPORARY CONSTRUCTION EASEMENT

236TH AVENUE SE
(SUBCOLLECTOR)
(SEE PROFILE, SHEET 8)

20' TEMPORARY CONSTRUCTION EASEMENT (BOTH SIDES)

WETLAND C (UNREGULATED)

WETLAND B

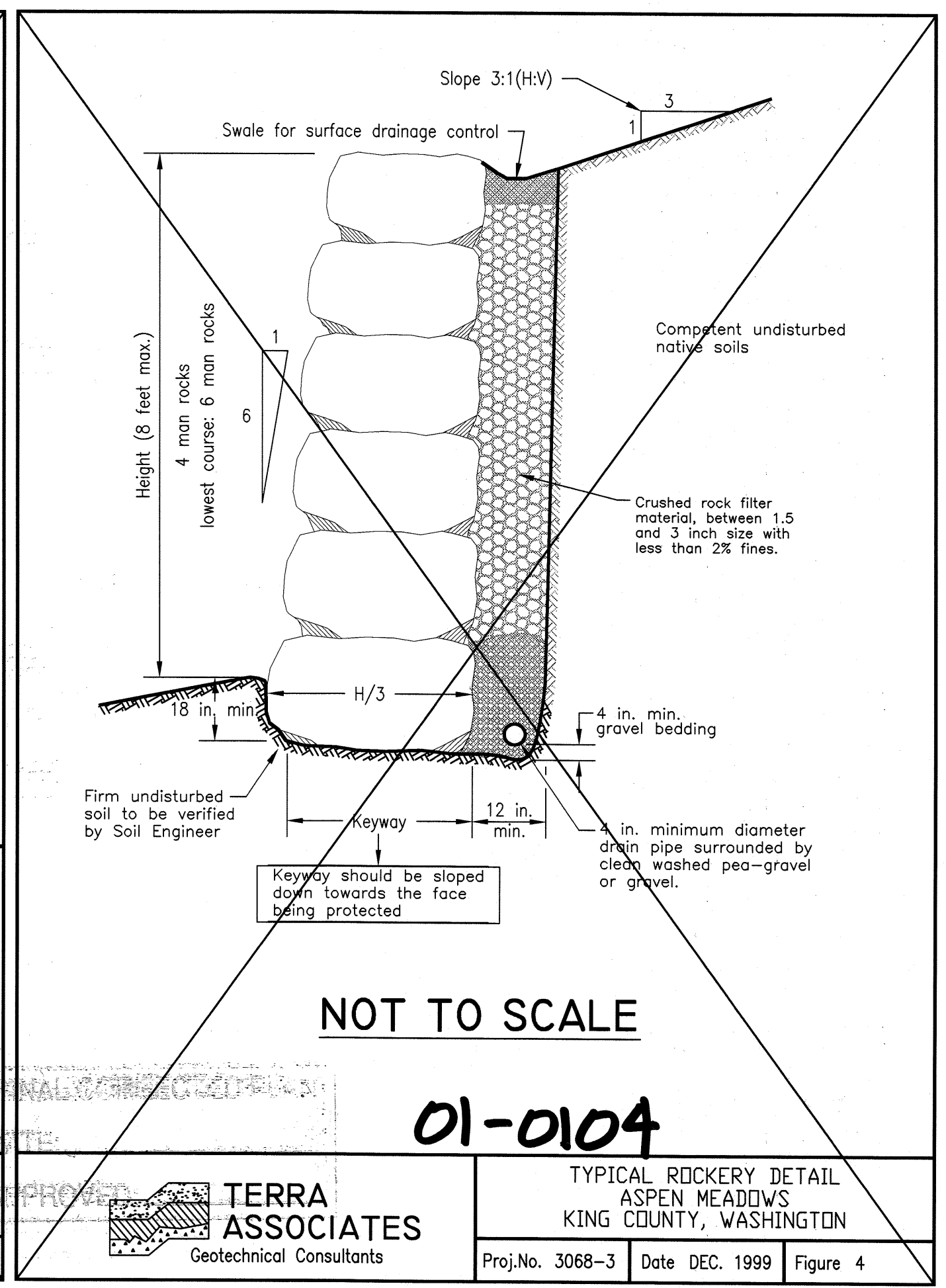
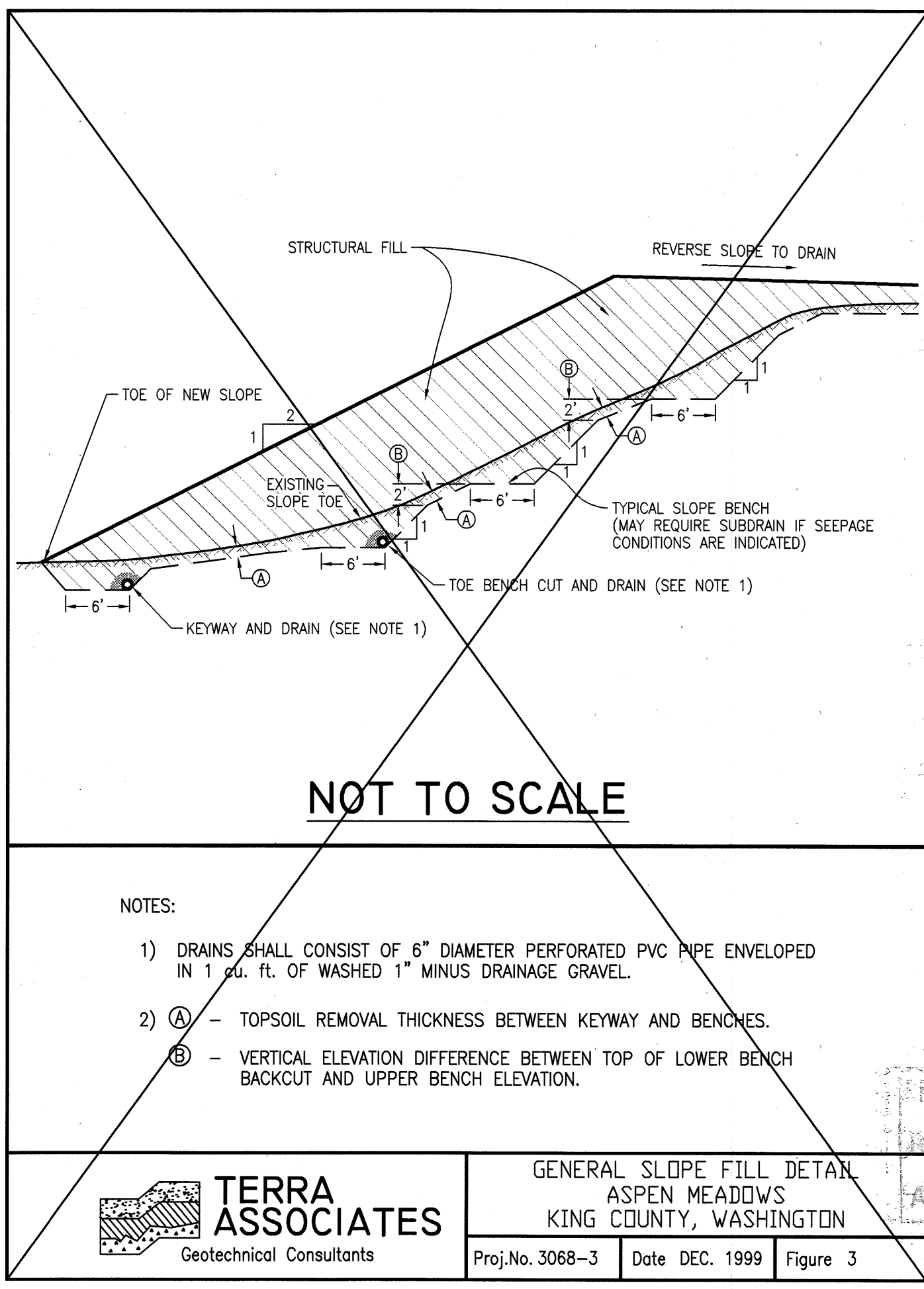
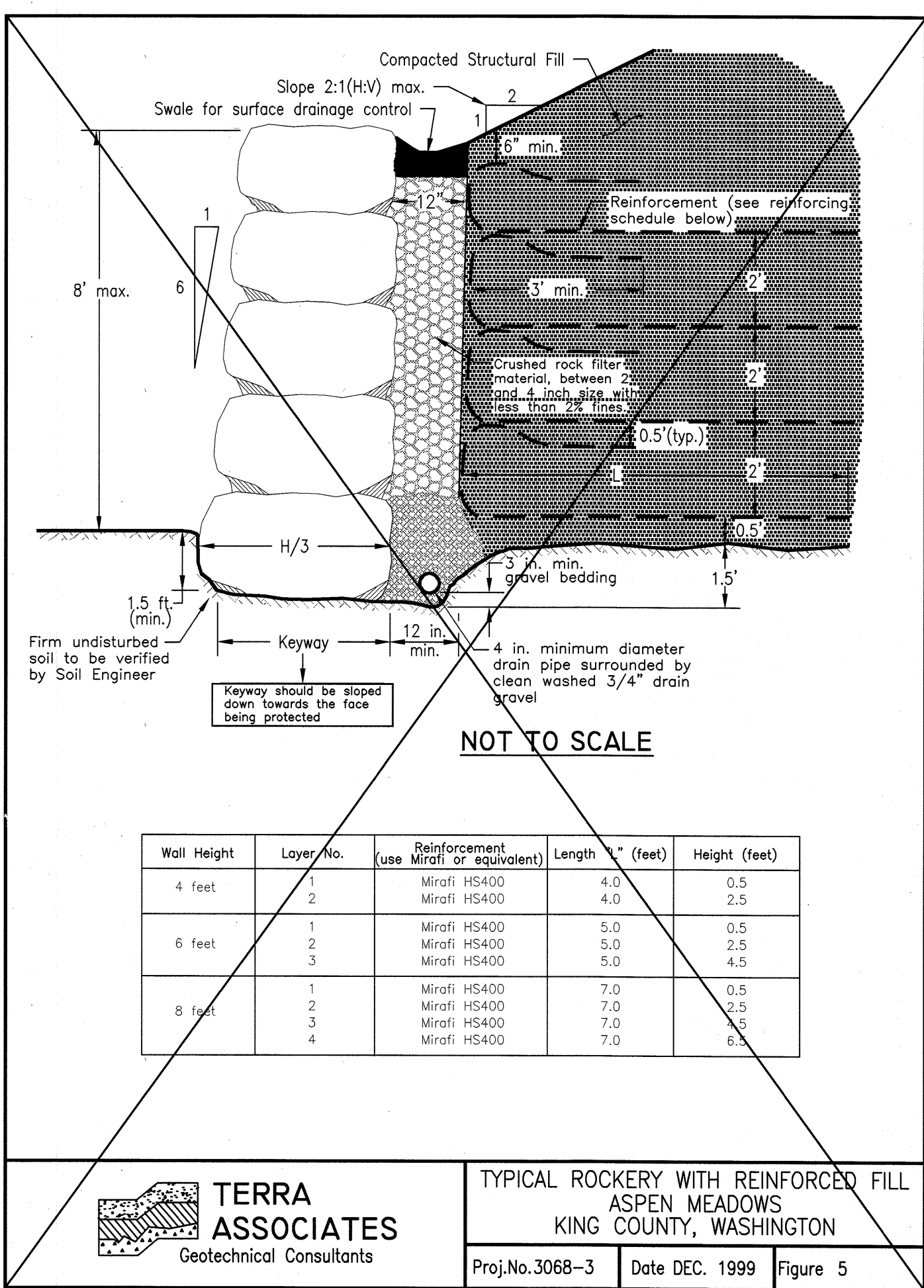
WETLAND A

25' BUFFER

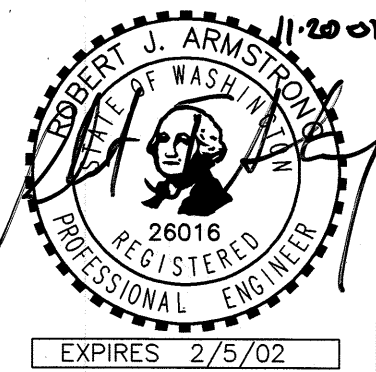
PINE VIEW
KODDES #L98P0013

FOR CONTINUATION
SEE SHEET 6

LOT 2
KCSP 1080891
8203300594



- NOTES:
- 1) DRAINS SHALL CONSIST OF 6" DIAMETER PERFORATED PVC PIPE ENVELOPED IN 1' TO 2' OF WASHED 1" MINUS DRAINAGE GRAVEL.
 - 2) A - TOPSOIL REMOVAL THICKNESS BETWEEN KEYWAY AND BENCHES.
 - 3) B - VERTICAL ELEVATION DIFFERENCE BETWEEN TOP OF LOWER BENCH BACKCUT AND UPPER BENCH ELEVATION.



FINAL CORRECTED PLAN
DATE: 12/5/2001
APPROVED: [Signature]
K.C. / C.O. SAMMAMISH
PORTION ONLY

CONSULTANT REVIEW
TO THE BEST OF MY KNOWLEDGE, THIS PLAN SET COMPLIES WITH KING COUNTY CODES AND ORDINANCES.
BY L.M. READ 4/18/00
NAME DATE
Lisa M. Read, CONSULTING ENGINEER (406) 388-1154 PHONE

KING COUNTY D.E.S. SCREENED
DESIGNED BY R. USAMAN 5/12/00
Review Engineer Completion Date
Senior Engineer
JAMES H. SANDERS, P.E.
DEVELOPMENT ENGINEER
Comments:

No.	Date	By	Ckd.	Appr.	Revision
5	10/23/01	PCM			FINAL CORRECTED PLANS
4	4/14/00	RIA			ADD LINEAR SAND FILTER
3	2/18/00	PCM			PER KING COUNTY REVIEW COMMENTS #2
2	1/24/00	PCM			PER KING COUNTY REVIEW COMMENTS #1
1	12/10/99	MTS			PER PEER REVIEW COMMENTS

Title:
GRADING PLAN
OFFSITE

For:
WILLIAM BUCHAN HOMES
11555 NORTHUP WAY
BELLEVUE, WA 98004
CONTACT: GREG NELSON (425)828-6424

Scale:
Horizontal 1"=50'
Vertical 1"=5'

Designed, Drawn, Checked, Approved, Date:
PCM PCM RIA RIA
1/20/99

**18215 72ND AVENUE SOUTH
KENT, WA 98032
(425)251-6222
(425)251-8782 FAX
CIVIL ENGINEERING, LAND PLANNING,
SURVEYING, ENVIRONMENTAL SERVICES**

Job Number: 6271
Sheet: 7 of 21

Bar Hausen ENGINEERS, INC.
CONSULTING ENGINEERS